

AMENDMENT TO THE CLAIMS:

Please amend claims 33 and 48 as indicated below. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1.-32. (Cancelled)

33. (Currently Amended) A method for giving to at least one user access to a respective home operator over a communication network, said access being via an access network and through any of a plurality of supported visited networks, wherein at least one of said supported visited networks comprises a proxy/relay agent for those authentication requests that must be forwarded towards an identified operator and a redirect agent for those authentication requests that have an unknown realm, whereby said at least one user is given the possibility of selecting one of said supported visited networks as the path for reaching said respective home operator, the method further comprising:

receiving from said at least one user, user credentials at said access network, wherein the user credentials comprise a realm-identification component;

forwarding said user credentials to an authentication function at said access network; and
searching in a routing table for a realm identified by the realm-identification component, wherein when the realm is not included in the routing table, further performing the steps of:

simultaneously redirecting to all said supported visited networks the user credentials whose realm-identification component does not correspond to any realm identified in the routing table;

returning from said supported visited networks to said access network redirect notifications as well as contact information to said user's respective home operator;

retrieving a set of available roaming networks for said at least one user, thus retrieving a list of operators holding a roaming agreement with said respective home operator of said at least one user;

forwarding said list to said at least one user;

receiving from said at least one user at said authentication function an identifier of an operator selected from said list; and

forwarding to the operator identified by said identifier a user's authentication request.

34.-35. (Cancelled)

36. (Previously Presented) The method of claim 33, comprising the step of including the user credentials in said user's authentication request.

37. (Previously Presented) The method of claim 33, comprising the steps of: assigning to said at least one user a Network Access Identifier (NAI); and identifying said at least one user through the realm part of said NAI.

38. (Previously Presented) The method of claim 33, wherein said steps of receiving and forwarding user credentials and retrieving a set of available roaming networks is performed only once, when a first authentication request is received by said authentication function in respect to a user for which no direct roaming agreements exist with said user's respective home operator.

39. (Previously Presented) The method of claim 33, wherein, when said access network has a direct roaming agreement with said user's respective home operator, comprising the step of forwarding to said at least one user a list including said user's respective home operator only.

40. (Previously Presented) The method of claim 33, wherein, when said access network has a direct roaming agreement with said user's respective home operator, comprising the step of directly forwarding the user's authentication request to said user's respective home operator.

41. (Previously Presented) The method of claim 33, comprising the step of proxying said user's authentication request from said operator identified by said identifier to said user's respective home operator.

42. (Previously Presented) The method of claim 33, comprising the step of selecting said authentication function as an Extensible Authentication Protocol (EAP) based function.

43. (Previously Presented) The method of claim 33, comprising the step of including in at least one of said access network and said supported visited networks a Diameter node.

44. (Previously Presented) The method of claim 33, comprising the step of including in said access network a proxy/relay agent.

45.-47. (Cancelled)

48. (Currently Amended) A communication network arranged for giving to at least one user access to a respective home operator via an access network and through any of a plurality of supported visited networks, wherein:

at least one of said supported visited networks comprises a proxy/relay agent for those authentication requests that must be forwarded towards an identified operator, and a redirect agent for those authentication requests that have an unknown realm, whereby said at least one user is given the possibility of selecting one of said supported visited networks as the path for reaching said respective home operator;

said access network has an associated authentication server, said access network being configured for receiving, from said at least one user, user credentials comprising a realm-identification component and forwarding said user credentials to said authentication server; and

searching in a routing table for a realm identified by the realm-identification component, wherein when the realm is not included in the routing table, further performing the steps of:

simultaneously redirecting to all said supported visited networks the user credentials whose realm-identification component does not correspond to any realm identified in the routing table;

returning from said supported visited networks to said access network redirect notifications as well as contact information to said user's respective home operator;

said authentication server being configured for retrieving a set of available roaming networks for said at least one user, thus retrieving a list of operators holding a roaming agreement with said respective home operator of said at least one user, and forwarding said list to said at least one user; and

said authentication server being further configured for receiving from said at least one user an identifier of an operator selected from said list, and forwarding to the operator identified by said identifier a user's authentication request.

49.-50. (Cancelled)

51. (Previously Presented) The communication network of claim 48, wherein said authentication server is configured for including the user credentials in said user's authentication request.

52. (Previously Presented) The communication network of claim 48, wherein said at least one user is identified by a Network Access Identifier (NAI) and said access network is configured for identifying said at least one user through the realm part of said NAI.

53. (Previously Presented) The communication network of claim 48, wherein said authentication server is configured for receiving and forwarding user credentials and retrieving a set of available roaming networks only once, when a first authentication request is received by said authentication server in respect to a user for which no direct roaming agreements exist with said user's respective home operator.

54. (Previously Presented) The communication network of claim 48, wherein said access network has a direct roaming agreement with said user's respective home operator and said access network is configured for forwarding to said at least one user a list including said user's respective home operator only.

55. (Previously Presented) The communication network of claim 48, wherein said access network has a direct roaming agreement with said user's respective home operator and said access network is configured for directly forwarding the user's authentication request to said user's respective home operator.

56. (Previously Presented) The communication network of claim 48, wherein said supported visited networks are configured for proxying said user's authentication request from said operator identified by said identifier to said user's respective home operator.

57. (Previously Presented) The communication network of claim 48, wherein said authentication server is an Extensible Authentication Protocol (EAP) based server.

58. (Previously Presented) The communication network of claim 48, wherein at least one of said access network and said supported visited networks is configured as a Diameter node.

59. (Previously Presented) The communication network of claim 48, wherein said access network includes a proxy/relay agent.

60.-62. (Cancelled)

63. (Previously Presented) The communication network of claim 48, in the form of an Internet Protocol (IP) network.

64. (Previously Presented) A computer readable medium encoded with a computer program product loadable into a memory of at least one computer and including software code portions for performing the steps of any one of claims 33 or 36-44.